Abstract

In a speech transmission system, an input speech signal is applied to a speech encoder (12, 36) for encoding the input speech signal. The encoded speech signal is transmitted via a communication channel (10) to a speech decoder (30, 48).

In order to improve the performance of the transmission system in the presence of background noise, it is proposed to introduce background noise dependent processing elements in the speech encoder (12, 36) and/or in the speech decoder (30, 48)

In a first embodiment of the invention, the parameters of the perceptual weighting filter (124) in the speech encoder (12, 36) are derived by calculating linear prediction coefficients ($\hat{a}$) from a speech signal which is processed by means of a high-pass filter (82).

In a second embodiment of the invention, an adaptive post filter (150) in a speech decoder (30, 48) is by-passed when the noise level exceeds a threshold value.

Fig. 1